

Ackley Dias Will

PhD | Associate Professor of Computing | Andrews University

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Computer scientist and educator working in computer vision, machine learning, medical imaging, and assistive technology. University teaching since 2013, with earlier experience in scientific computing, software development, and information technology. Current work connects transfer learning and model evaluation with student research and practical computing education.

Education

2017-2021 PhD in Electrical Engineering with a concentration in Computer Engineering. University of Campinas (UNICAMP), Campinas, Brazil. Dissertation: Modeling and synthesis of facial aspects of Brazilian Sign Language for signing avatars. Advisor: José Mario De Martino.

[Doctoral thesis in the UNICAMP repository](#)

2009-2012 Master of Science in Computational Modeling with a concentration in Scientific Computing. National Laboratory for Scientific Computing (LNCC), Petrópolis, Brazil. Thesis: Simulation of performance of parallel applications of coarse granularity in distributed computing environments. Advisor: Eduardo Lucio Garcia.

2001-2005 Bachelor in Information Systems. Universidade Estácio de Sá (UNESA), Petrópolis, Brazil. Capstone: Electronic Games in Java. Advisor: Eduardo Lucio Garcia.

Academic and Professional Appointments

2022-present Associate Professor of Computing. Andrews University, Berrien Springs, Michigan.

July 2024-July 2026 Chair of the Department of Computing. Andrews University. Academic planning, curriculum, personnel processes, research infrastructure, and experiential learning.

2022 Researcher. CESAR, Center for Advanced Studies and Systems, Brazil. Assistive technology.

2018-2022 Program Coordinator. Information Systems and Computer Engineering, Adventist University of São Paulo (UNASP), Brazil.

2013-2022 Professor. Information Systems and Computer Engineering, UNASP, Brazil.

2015-2021 Researcher. UNICAMP, Brazil. Facial motion capture and sign-language avatar animation.

2012-2013 Researcher and Developer. Siger LNCC. Numerical simulation of heterogeneous reservoirs with geomechanical coupling.

2010-2012 Researcher and Developer. Efficient Municipalities Project, LNCC. Business intelligence for municipal management.

2001-2012 IT Manager. Adventist Petropolitan Institute of Education (IPAE), Brazil. Infrastructure, databases, and institutional software.

Publications

Refereed Journal Articles

- Dias Will, A. (2026). Data Augmentation Strength, Training Stability, and Clinical Trade-Offs in Transfer Learning for Chest X-ray Pneumonia Classification. *Cureus*, 18(4), e106519. [doi:10.7759/cureus.106519](https://doi.org/10.7759/cureus.106519)
- Dias Will, A., & Sarkodie, J. (2026). An Empirical Study of Dataset Size Effects on Fine-Tuning Depth in Transfer Learning for Chest X-ray Classification. *Cureus*, 18(3), e106159. [doi:10.7759/cureus.106159](https://doi.org/10.7759/cureus.106159)
- Paiva, F. A., Barbosa, P. A., De Martino, J. M., Will, A. D., Oliveira, M. R. N. S., Silva, I. R., & Xavier, A. N. (2018). Análise do papel das expressões não manuais na intensificação em Libras. *DELTA: Documentação de Estudos em Linguística Teórica e Aplicada*, 34(4), 1135-1158. [doi:10.1590/0102-445069907579551549](https://doi.org/10.1590/0102-445069907579551549)
- Oliveira, F. S. G., Karam Filho, J., Cunha, G. N., Lara, P. C. S., Will, A. D., & Madeira, L. (2012). Gestão Municipal Eficiente Usando Técnicas de Business Intelligence. *Revista de Engenharia da Universidade Católica de Petrópolis*, 7(1). [Journal article](#)

Refereed Conference Papers

- Will, A. D., De Martino, J. M., & Bezerra, J. (2019). Automatic Mapping of Facial Mocap Data to a Realistic Signing Avatar. *Memorias del X Congreso Iberoamericano de Tecnologías de Apoyo a la Discapacidad (IBERDISCAP 2019)*, Buenos Aires, Argentina.
- Will, A. D., De Martino, J. M., & Bezerra, J. (2018). An Optimized Marker Layout for 3D Facial Motion Capture. *Smart Tools and Apps for Graphics - Eurographics Italian Chapter Conference (STAG 2018)*, 107-113. The Eurographics Association. [doi:10.2312/stag.20181303](https://doi.org/10.2312/stag.20181303)
- Paiva, F. A., Will, A. D., De Martino, J. M., Barbosa, P. A., & Benetti, A. B. (2017). Incorporating Non-Manual Expressions into a Realistic Signing Avatar. *Memorias del Congreso Iberoamericano de Tecnologías de Apoyo a la Discapacidad (IBERDISCAP 2017)*, Bogotá, Colombia, 551-558.

Additional Full Papers in Conference Proceedings

- Andrade, R. A., Hollanda, A., & Will, A. D. (2020). Aplicação Web Para E-Commerce Desenvolvido em ASP.NET MVC 5. *17th International Conference on Information Systems and Technology Management (CONTECSI)*, virtual.
- Will, A. D., Garcia, E. L. M., Costa, P., & Barbosa, H. J. C. (2011). Load Balancing for Parallel Evolutionary Algorithms in Heterogeneous Environment. *CILAMCE XXXII*, Ouro Preto, Brazil.

Expanded Abstracts in Conference Proceedings

- Soares, J. N. M. M., Trindade, V. G., Will, A. D., & So, B. (2020). Aplicação de Técnicas de Machine Learning na Detecção do Câncer de Pulmão. *17th CONTECSI*. Honorable Mention in Scientific Initiation.
- Souza, M. T., Miranda, W. A. J., Will, A. D., & So, B. (2020). Tecnologia Assistiva para Deficientes Visuais. *17th CONTECSI*.
- Francisco, L. R., Siqueira, M. N., & Will, A. D. (2020). UX Design Usado no Desenvolvimento de Páginas E-Commerce. *17th CONTECSI*. Honorable Mention in Scientific Initiation.

Additional Academic Proceedings

Collaborative papers with undergraduate students in UNASP academic proceedings.

2017 UNASP Full Papers

Aplicando a Metodologia Unreal Development Kit para Desenvolvimento de Games
Linguagem de Programação SWIFT: Apresentação das Principais Características
Big Data na Tomada de Decisão
Sistema de Monitoramento à Pessoas Portadoras de Marcapasso
Protótipo de Prótese Canina Automatizada
Qualidade de Serviço em Redes de Computadores
Protótipo de um Gerenciador de Atividades dos Membros

2016 UNASP Full Papers

LINGUAGEM X: Desenvolvimento de uma linguagem de programação interpretada
Gestão Unificada Contra Ameaças - Fortigate
Sistema de Troca de Tarefas Myszap
Estudo de Aplicações Gráficas Utilizando OpenGL
Desenvolvimento do Sistema de Gestão de Grade Utilizando C#
Computação em Nuvem Aplicada em Infraestrutura

2015 UNASP Full Papers

Acessibilidade com Arduino
Domótica
Biblioteca em C para Iniciantes em Programação
Computação na Nuvem
Desenvolvimento de Website Comercial
Fortigate
Jogos Educacionais
Mainframes
Realidade Aumentada: Desenvolvendo no Vuforia com Unity3D
Virtualização de Servidores
E-Commerce: Um Mercado em Crescimento
Segurança Residencial de Baixo Custo com Arduino

Published Conference Abstracts

2017 Conference abstracts. Expresiones Faciales de Libras en un Avatar tridimensional (2º Congresso Internacional Adventista de Tecnologias); Serious Games - Jogos Orientados ao Aprendizado; Uso de IBM Watson en la Gestión Académica.

2015 Conference abstracts. Automação Residencial com Arduino; Big Data; BPM - Modelagem de processos de negócios; Computação Gráfica Aplicada a Criação de Jogos com Foco Educacional; Estudo de Aplicações Gráficas Utilizando OpenGL; Matrizes de Transformação Geométrica; Prototipando o Meio Ambiente.

Conference Presentations and Invited Talks

Recent Scholarly Presentations and Posters

2026 Walker, L., & Dias Will, A.. Replication Study on Use of U-Net Architecture in Brain Tumor Segmentation. MBAA International Conference, Chicago, March 25-27.

2025 Manigat, G., & Will, A.. Detecting and Classifying Brain Tumors Using Deep Learning. MBAA International Conference, Chicago, April 9-11.

2025 Nwanganga, A., & Will, A.. Deep Learning Model for Detection of Cardiac Arrhythmias from ECG Signals. MBAA International Conference, Chicago, April 9-11.

2024 Adap, S., & Will, A.. ASL Learning Enhanced by Computer Vision. MBAA International Conference, Chicago, April 10-12.

2024 Pasechnik, A., Banuag, B., & Will, A.. Data Augmentation Techniques in Accent Classification. MBAA International Conference, Chicago, April 10-12.

2024 Adap, S., with Will, A.. Developing a Computer Vision-Based Mobile-Assisted Learning App for ASL Recognition. Michigan Academy of Science, Arts & Letters Annual Conference, Southfield, Michigan, March 8.

2024 McCulloch, A., with Will, A.. Computer Vision Closing the Emotional Gap. Michigan Academy of Science, Arts & Letters Annual Conference, Southfield, Michigan, March 8.

2024 Pasechnik, A., & Will, A.. Improving Accented Speech Recognition: An In-Depth Study of Feature Engineering with Convolutional Neural Networks (CNN). Michigan Academy of Science, Arts & Letters Annual Conference, Southfield, Michigan, March 8.

Invited Talks and Workshops

March 24, 2026 Using AI & Computer Vision for Real-Time Emissions, Safety, and Infrastructure Monitoring. PLX Global Board Leadership Forum. International executive and board audience connected with Petrolimex.

October 2025 From Pixels to Decisions: Vision AI in Healthcare and Industry. Global Executive Institute. Vietnamese executive delegation.

September 26, 2025 Computer vision concepts and applications. Invited presentation, Industry Lab Summit.

2025 Human oversight and responsible use of generative AI. Invited co-lead, AI Fireside Chat / University AI Initiative, Andrews University.

June 2024 Machine learning workshop. Summer Mathematics Research Group, Andrews University.

2017 Criação e utilização de videoaulas como metodologia ativa. Presentation on instructional video and active learning.

Earlier Presentations and Teaching

Earlier Scholarly and Invited Presentations

2021 Will, A. D., & De Martino, J. M.. Modeling and Synthesizing Realistic Facial Expressions for Sign Language 3D Avatars. Eurographics Doctoral Consortium, Vienna, Austria.

2020 Will, A. D.. Captura de movimento aplicada a expresiones faciales en avatares de lenguaje de señas. Congreso Internacional: Tecnología, Innovación y Sistemas Inteligentes, organized by Adventist universities in Peru, Colombia, and Mexico, September.

2019 Will, A. D.. More Than Words: Facial Expressions in Sign Language Avatars. IV CIAT, Universidad Peruana Unión, Peru, September.

2018 Will, A. D., De Martino, J. M., & Bezerra, J.. An Optimized Marker Layout for 3D Facial Motion Capture. STAG / Eurographics Italian Chapter Conference.

2017 Will, A. D.. Avatar realista traductor de lenguaje de señas 'Libras'. II CIAT, Universidad Adventista de Chile, Chillán, September 7-9.

2012 Will, A. D., & Garcia, E. L. M.. Performance Simulator of Coarse-Grained Parallel Applications in Distributed Computing Environments. Conference presentation.

2011 Will, A. D., Garcia, E. L. M., Costa, P., & Barbosa, H. J. C.. Load Balancing for Parallel Evolutionary Algorithms in Heterogeneous Environment. Conference presentation.

2010 Saldanha et al., including Will, A. D.. Gestão municipal eficiente usando técnicas de Business Intelligence; Modelos estatísticos aplicados à gestão municipal. Seminar presentations.

Teaching

Andrews University Courses

CPTR 235 Data Analytics Fundamentals

CPTR 252 Mobile App Development

CPTR 325 Media Application Development

CPTR 330 Text and Media Analytics

CPTR 425 Programming Languages

CPTR 430 Analysis of Algorithms

CPTR 435 Machine Learning

CPTR 450 Network Computing and Architecture

CPTR 475 Topics in Computer Vision

BSAD 720 Artificial Intelligence Applications in Business | Doctoral level, Fall 2026

Course Development and Online Education

Developed Computer Vision, Data Analytics Fundamentals, Text and Media Analytics, and Artificial Intelligence Applications in Business at Andrews. Redesigned computing courses around applied projects, demonstrations, and iterative assignments.

Creator and instructor, Computer Vision with PyTorch: Practical Deep Learning. Udemy, published October 2026. Image classification, convolutional neural networks, transfer learning, selective fine-tuning, and model evaluation.

Earlier Teaching at UNASP

Programming in Java, C#, and Python; algorithms; object-oriented programming; image processing and computer vision; computer graphics; multimedia systems; systems analysis and design; networks; computer organization and architecture; introduction to computer engineering; general systems theory; and emerging topics.

Student Research and Mentoring

Faculty supervision at Andrews includes Research, Honors, Practicum, and Independent Study. The projects below identify the student and the supervisory context.

2025-2026 Jordan Sarkodie | Research. Dataset size and fine-tuning depth in chest X-ray classification; coauthored a peer-reviewed Cureus article.

2025-2026 Alexander Nwanganga | Research. Cardiac-arrhythmia analysis using machine learning; Undergraduate Research Scholarship and MBAA poster.

2025-2026 Semhar Hailu | Honors. Mobile application to support daily routines and independence for individuals with Autism Spectrum Disorder.

2025-2026 Levi Walker | Research. Brain-tumor segmentation using computer vision; MBAA poster and departmental presentation.

2025-2026 Hans Jaeger | Practicum. Self-flying drone system.

2025-2026 Darren Louis-Jean | Practicum and Independent Study. Automated pothole detection using YOLO.

2025-2026 Ian Freeman | Practicum. 3D interactive game development.

2025-2026 Edd Joseph | Honors. Automating Arrivals Notice Data Entry in Logistics.

2024-2025 Grant Lee | Practicum. Computing solution for the Biology Department cricket laboratory.

2024-2025 Guichard Manigat | Research. Deep-learning detection and classification of brain tumors; Undergraduate Research Scholarship, MBAA poster, and departmental presentation.

2024-2025 Justyce Goode | Practicum. Game development using Unity 3D; departmental presentation.

2024-2025 Songhwa Chae | Research. Self-driving cars and computer vision; departmental presentation.

2023-2025 Anastasia Pasechnik | Honors. Automating Phonetic Transcription; collaborative accent-classification presentations at MBAA and the Michigan Academy.

2023-2024 Anthony McCulloch | Research. Facial-expression detection using computer vision; Michigan Academy presentation.

2023-2024 Sandrine Adap | Honors and co-supervision. Computer-vision ASL recognition and mobile-assisted learning; VR and proprioceptive-input project; external conference presentations.

2023-2024 Mathias Bruggemann | Honors. Plane Occlusion Removal for 2D Image Models for Manual Meshing.

2022-2023 Honors Research Mentor. Computer Science and Engineering Honors projects.

Earlier Supervision and Academic Evaluation

At UNASP, completed 35 undergraduate capstone and thesis supervisions during approximately 2013-2020, spanning assistive technology, machine learning, software systems, games, networks, data analysis, and IoT. Served on more than 45 undergraduate capstone and thesis examination committees in Information Systems and Computer Engineering.

Teaching Practice and Student Support

Integrates technical practice with professional responsibility, faith, and character through discipline-specific reflections, including Code of Character, Data Points of Faith, and Biblical Wisdom Through the Lens of ML. Uses applied demonstrations and project feedback to support student development.

Service and Professional Recognition

Academic Leadership and University Service

2024-2026 Departmental development at Andrews. Led or supported Applied Artificial Intelligence concentration design; established a research and applied-projects room and student lounge; supported Computing Club and industry-linked experiential learning.

2025-2026 Faculty Senate Representative. College of Professions, Andrews University.

2023-2026 Faculty Policy and Development Council. Andrews University.

2026 Physics Program Review Panel. Andrews University.

2024-2026 Faculty and staff search committees. Computing faculty search chair (2024-2025); committee service for Engineering and Computing leadership and administration, Architecture and Interior Design leadership, Aviation, Accounting, Mathematics, Cybersecurity, and Computing administration.

2026 College and commencement service. College of Professions awards banquet team and commencement responsibilities.

Scholarly and Community Service

2026 Expert academic program reviewer. General Conference Education Department / International Board of Education. Review of a proposed Bachelor of Artificial Intelligence program.

2023 Manuscript reviewer. Revista Inclusão & Sociedade.

2020 Scientific work evaluator. ENAIC UNASP.

2018 Conference planning and organization. III CIAT, UNASP-Hortolândia, Brazil.

2025 Invited devotional speaker. BEAR Summer Lab, a robotics and innovation program for middle-school students.

Honors and Awards

2026 The Open Door Award. Andrews University; student-selected recognition for approachability and student support.

2024 and 2025 Computing Teaching Excellence Award. Andrews University; student-selected.

2023 Undergraduate Teaching Excellence Award. Andrews University; student-selected.

2014, 2016, 2018, 2019 Class Patron or Paraninfo. Selected by the Information Systems graduating classes, UNASP.

2020 Honorable Mention in Scientific Initiation. Coauthor of two recognized works at 17th CONTECSI: lung-cancer detection with machine learning and UX design for e-commerce.

Research Funding

FY2026 AI for Medical Imaging. Principal Investigator, Andrews University Faculty Research Grant, \$5,000 awarded.

Professional Development and Membership

2025 Deep Learning Specialization. DeepLearning.AI / Coursera.

2023 Machine Learning Specialization. Stanford Online / DeepLearning.AI / Coursera.

2022 Supervised Machine Learning Regression and Classification. Stanford University / Coursera, 33 hours.

2022 Deep Learning Applications for Computer Vision. University of Colorado Boulder / Coursera.

2021 Java Programming. Oracle Academy, 30 hours.

2013 C# 2010 Module I. Impacta, 40 hours.

2010 Introduction to Octave. LNCC, 6 hours.

Faculty development at Andrews University, 2022-2026; University of Michigan two-day Grant Training Workshop, 2022-2023. IEEE professional membership, 2022-2023.